

FIG. 2A

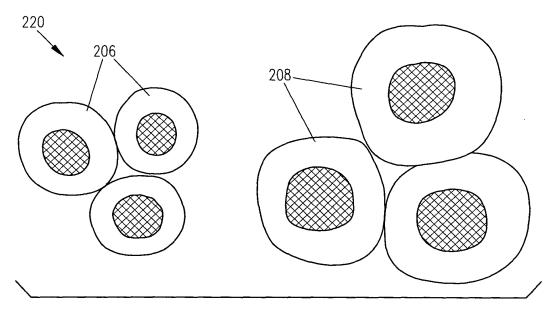


FIG. 2B

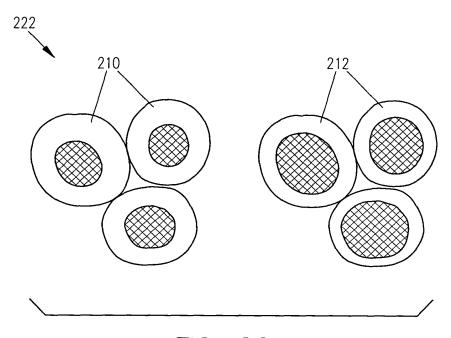


FIG. 2C

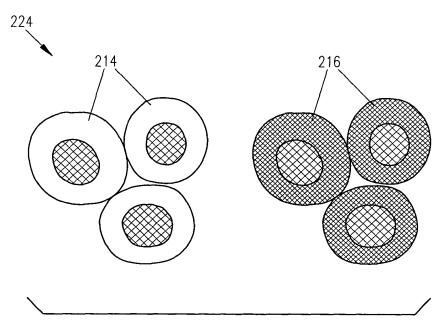


FIG. 2D

DOCKET NO.: 1547.017US1(PD-03W074)

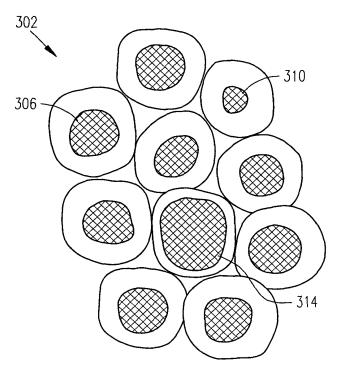


FIG. 3A

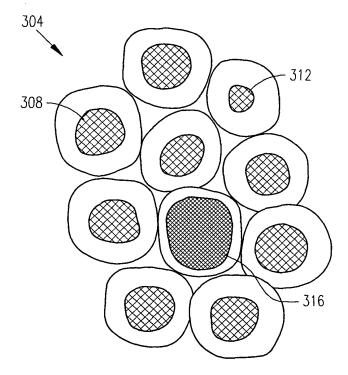


FIG. 3B

TITLE: SYSTEM AND METHOD FOR DETECTING ANOMALOUS TARGETS INCLUDING CANCEROUS CELLS INVENTORS NAME: Walter Wrigglesworth et al.

DOCKET NO.: 1547.017US1(PD-03W074)

## 5/7

		400
402	404	406
TARGET	FEATURE	INDICATOR
CELL # 1	CELL DIAMETER = 4	NOT APPLICABLE
CELL # 1	NUCLEUS DIAMETER = 3.5	NUCLEUS/CELL RATIO > .75
CELL # 1	CELL SHADING = 3	NOT APPLICABLE
CELL # 2	CELL DIAMETER = 4.5	NOT APPLICABLE
CELL # 2	NUCLEUS DIAMETER = 2	NOT APPLICABLE
CELL # 2	CELL SHADING = 8	CELL SHADING > 6
CELL # 3	CELL LENGTH = 6	NOT APPLICABLE
CELL # 3	CELL WIDTH = 2	CELL WIDTH/LENGTH < .9

FIG. 4

500

502	504
FEATURE SET	BELIEF FUNCTION
NUCLEUS TO CELL DIAMETER	IF > .8 AND TISSUE IS CERVICAL THEN PROBABILITY CELL IS CANCEROUS = 90%
CELL LENGTH TO WIDTH RATIO	IF > .6 AND TISSUE IS LUNG THEN PROBABILITY CELL IS CANCEROUS = 85%
CELL GRAYSCALE	IF SHADING IS > 8 AND CELL IS FROM LYMPH NODE THEN PROBABILITY CELL IS MELANOMA = 97%
NUCLEUS TO CELL DIAMETER	IF < .2 AND TISSUE IS CERVICAL THEN PROBABILITY CELL IS CANCEROUS = 10%
CELL DIAMETER AND STAIN	IF CELL DIAMETER IS > 8 IN UNSTAINED IMAGE AND IS GREEN IN STAINED IMAGE THEN PROBABILITY CELL IS CANCEROUS = 92%
CELL COLOR IN VISIBLE AND GRAYSCALE IN IR	IF THE CELL IS RED IN VISIBLE AND GRAYSCALE IN IR IS > 8 THEN PROBABILITY CELL IS NOT CANCEROUS = 99%

FIG. 5

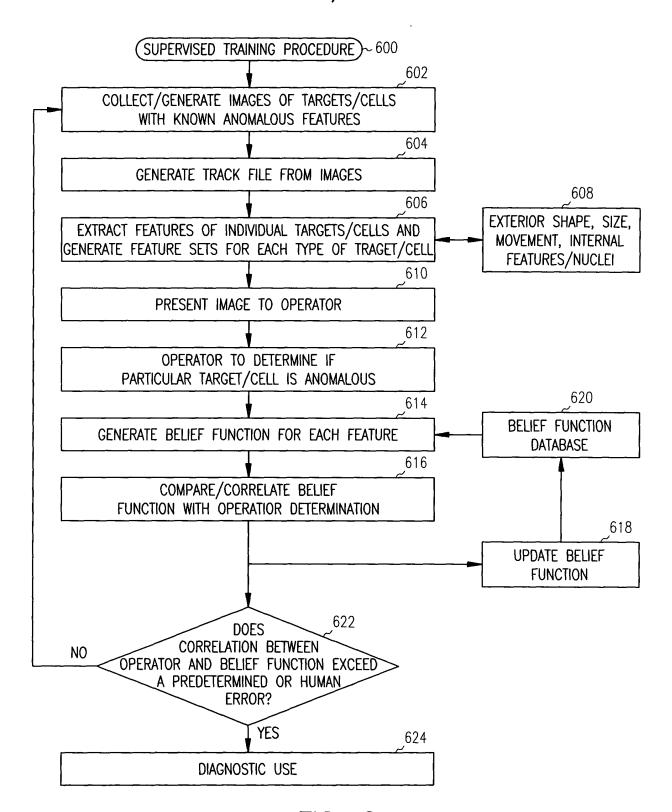


FIG. 6

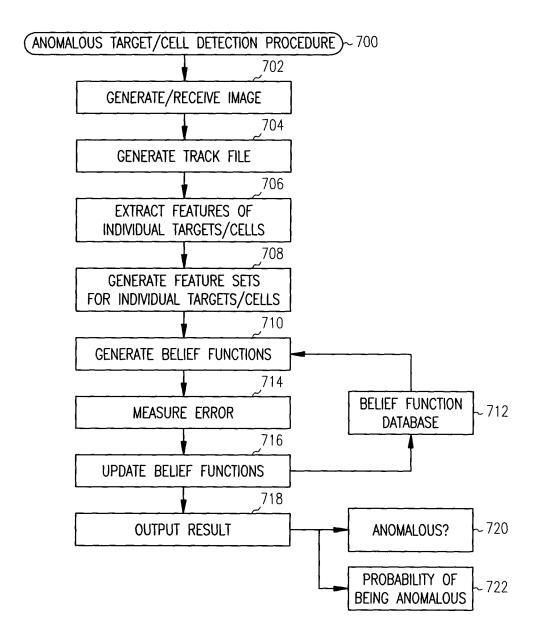


FIG. 7